

REMARKS

Claims 1-48 were pending. By this Amendment, dependent claims 47 and 48 have been canceled, without prejudice or disclaimer, and replaced by new independent claim 49, and claims 31 and 35 have been amended to clarify the claimed invention thereof. Accordingly, claims 1-46 and 49 are now pending, with claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35, 39 and 49 being in independent form.

Claims 1-48 were rejected under 35 U.S.C. § 103(a) as purportedly obvious over U.S. Patent No. 6,665,425 to Sampath et al. in view of U.S. Patent No. 6,405,178 to Manchala et al.

Applicant has carefully considered the cited art and the Examiner's comments in the April 27, 2006 final Office Action and the August 7, 2006 Advisory Action, and respectfully submits that independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35, 39 and 49 are patentable over the cited art, for at least the following reasons.

This application relates to monitoring status of usage of consumables (for example, toner, ink, etc.) and monitoring maintenance components, in a communications terminal apparatus or image forming apparatus, and keeping the manager in the loop for deciding whether to order supplies or repair service, because the manager in some instances can easily make a minor adjustment of the equipment or refill the consumables from available supplies in stock in-house, without ordering additional supplies or repair service.

Applicant devised an improved approach for maintaining a system, communication terminal apparatus or image forming apparatus, including notifying a manager who supervises the apparatus, using the registered electronic communications address of the manager, when a consumable product in the apparatus or system needs refill or when a maintenance component in the apparatus needs repair or replacement. Each of independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35, 39 and 49 addresses these features, as well as additional features.

For example, when the consumable product is replenished in the apparatus or repair of the maintenance component in the apparatus is completed, a report can be transmitted to the manager using the registered electronic communications address of the manager (independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35 and 39). In addition, it is preferable that other information that the manager can use to place an order, such as an order form for sending to the service depot and the registered electronic communications address of the service depot to which the order form can be sent (independent claim 49), be sent to the manager along with the notification that a consumable product in the apparatus or system needs refill or a maintenance component in the apparatus needs repair or replacement. The cited art does not disclose or suggest such features.

Sampath, as understood by Applicant, proposes techniques for automated diagnosis and remediation of a document processing system based on analysis of image quality.

As acknowledged in the Office Action, Sampath does not teach or suggest several features, including (1) automatically detecting a status of usage of a consumable product used in the apparatus and supplied by a service depot, as provided by claims 1, 9, 15, 23, 31 and 39, and (2) automatically detecting an event indicative of a defect in a maintenance component being used in the apparatus, as provided by claims 5, 12, 20, 28, 35 and 39.

Further, although Sampath proposes that diagnosis of defects can be transmitted to the customer or customer service engineer, Sampath assumes that the customer or customer service engineer will perform the repair action (see Sampath, column 4, line 65 through column 5, line 2), and therefore Sampath neither teaches nor suggests that (i) when the consumable product is replenished in the apparatus or repair of the maintenance component in the apparatus is completed, a report is transmitted to the manager using the registered electronic communications address of the manager (although Sampath, column 5, lines 4-8, proposes that after remedial action is taken, a verification process is performed and the result is logged into a database), (ii)

the request sent to the manager includes the identification of the apparatus, the specification of the consumable product, and the identification of the service depot, or (iii) the request sent to the manager includes an order form for sending to the service depot and the registered electronic communications address of the service depot to which the order form can be sent.

None of the portions (Abstract, column 4, line 11 through column 5, line 8, column 6, lines 15-50 and column 7, line 50 through column 8, line 51) of Sampath cited in the Office Action discloses or suggests features (i) through (iii) above.

Manchala, as understood by Applicant, proposes an automated electronic purchasing system. In the system proposed by Manchala, a system administrator specifies constraints which the system follows to purchase consumables automatically when the need arises. The system administrator may also specify selected consumables that will be ordered manually by a person without benefit of an electronic commerce system. Thus, Manchala assumes that when the administrator is notified, he/she will manually perform the remedial action and no further report to the administrator will be needed.

Although Manchala proposes automatic monitoring of the amount of consumables in printing systems, Manchala, like Sampath, does not teach or suggest, however, that (a) when the consumable product is replenished in the apparatus or repair of the maintenance component in the apparatus is completed, a report is transmitted to the manager using the registered electronic communications address of the manager, as provided by independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35 and 39, (b) the request sent to the manager includes the identification of the apparatus, the specification of the consumable product, and the identification of the service depot, as provided by independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35 and 39, or (c) the request sent to the manager includes an order form for sending to the service depot and the registered electronic communications address of the service depot to which the order form can be sent or

included along with the request sent to the manager (independent claim 49).

Therefore, neither Sampath nor Manchala discloses or suggests features (a) through (d).

Further, contrary to the contention in the Office Action with regard to (now-canceled) claim 48, Manchala does not disclose or suggest feature (c) above.

Manchala, proposes that the automated system, in response to a request for renewal of contract from a vendor, can commence renegotiation based on constraints pre-specified by an administrator, and the system can also receive other information, such as regarding maintenance and availability of new product features or options, from the vendor (column 2, lines 45-61 and column 5, lines 8-11). Manchala further proposes that the system can filter incoming messages to accept only pre-specified categories or types of messages from a vendor (column 3, lines 4-7 and 54-61). In addition, Manchala proposes that order for consumables can automatically be placed by the system with a vendor after inventory is checked by the system (column 3, lines 31-36, and column 4, lines 16-66), and the system can negotiate the price (or other terms) of the consumables with one or more vendors to obtain the best terms (that is, within the constraints pre-specified by the administrator) (column 3, lines 37-53). Thus, a system administrator can configure the automatic system through pre-specification of constraints.

However, Manchala simply does not disclose or suggest providing a controller configured to send a request for supplying the consumable product to the manager using the electronic communications address, the request (i) including an order form for sending to the service depot to order the consumable product and (ii) identifying the registered electronic communications address of the service depot to which the order form is to be sent, as provided by the subject matter of claim 49.

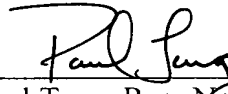
In view of the amendments to the claims and remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the

allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul Teng", is written over a horizontal line.

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